PTO/SB/08A (10-01)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE control number.

PTO/SB/08A (10-01)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE of information unless it contains a valid OMB

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

	3/100	ris a	s necessary)
Sheet	1	1	
		of	6

	offiess it contains a valid OMB
Applied	omplete if Known
Application Number Filing Date	10/077,654
First Named Inventor	February 14, 2002 Stanley S. Toncich
Art Unit Examiner Name	2817
Attorney Docket Number	To Be Assigned
- Tranibel	UTL 00161

			Bocket Number	UTL 00161
Evani	Dogue	U.S. PA	TENT DOGUM	
Examiner Cite Initials' No 1		1 0.15	TENT DOCUMENTS	
Initials No.1	Number- Kind Code ² (if know US- 5,729,239	MM-DD-YYYY		Pages, Columns, Lines, Where
$\frac{2}{3}$	us- 6,049,726	03-17-1998 04-11-2000	Rao, Jaganmohao R.	Figures Anneas
	US- 6,160,524 US- 6,198,441.D4	12-12-2000	Gruenwald, Werner, et al.	
5	us- 6,198,441 B1 us- 6,028,561	03-06-2001	Wilber, William	
6	US- 5,973,567	02-22-2000	Okabe, Hiroshi Takei, Ken	the same of the sa
7 7 8	US- 4,475,108	10-26-1999 10-02-1984	Heal, Mark D. ot al.	Manager and the second
	US- 3,678,305 US- 3,918,012	07-18-1972	Moser, Kenneth R. George, Edward	Abstract, Fig. 1
	US- 5,450,092	11-04-1975	Peuzin, Jean Claude	Source, Fig. 1
	JS- 6,333,719 B1	09-12-1995 12-25-2001	Uds. Salvendranau	the contract of the contract o
13	US- 5,212,463 US- 4,733,328	05-18-1993	Varadan, Vijay K. Babbitt, Richard W., et al.	
14 U	S- 5,617,104	03-22-1988 04-01-1997	Didzel, Daniel C	
19 0	s. 5,307,033	04-26-1994	Das, Satvendens	9
147 1 0	5 FF7 00-	06-27-1995	Nuscica, Thomas E. ol al	Maria da de la Maria de la Compansión de
18 Us	5.561 407	09-17-1996	Sengupta, Louise, et al. Varadan, Vijay K., et al.	
2 19 us 2 20 us	5,589,845	10-01-1996 2-31-1996	Noscica, Inomas E olal	The second secon
120 108	5,496,795	03-05-1996	- anuloiski Robort La ""i	- wa
			Das, Satyendranath	

		Das,	Satyendranath	
Examiner Cite Initials No. 1	Foreign Patent Document	REIGN PATENT C		
21 22	Country Code 3 - Number 4 - Kind Code 5 (# know WO 00/62367 JP 29-05 00 200	Publication Date MM-DD-YYYY 10-19-2000	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
23	JP 29-05-00 2001338839 EP 0 637 131 A1 EP 0 843 374 A2	07-12-2001 02-01-1995	Carlsson, Erik, et al. Tsuneo, Mishima	- gates Appear
25 26 27	EP 0 638 953 A1 WO 00/35042	05-20-1998 02-15-1995	Fujita Masanori uller, Frithjoj E., et al. Yasuoka, et al.	Abstract, Fig. 1
28	EP 0 680 108 A1 EP 0 881 700 A1	06-15-2000 11-02-1995	Atokawa, Masavuki	
	WO 00/28613 DE 40 36 866 A1	07.25 400	engupta, Louise et al	
caminer gnature	a Blata	20-7991	Yamamoto, Masaki	

EXAMINER: Initial/if eference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in 1 Applicant's unique citation designation supplies (antique) 2 See Kind Codes of USPTO Codes of

conformance and next considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 301.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 5 Kind of documents, the English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will use decading upon the code of the individual state of the code of the individual state.

English language Translation is attached.

Burden Hour Statement This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Commissioner for Patents, Washington, DC 20231.

SEND TO: Assistant

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE control number.

Substitute for form 1449A/PTO Complete if Known Application Number 10/077,654 INFORMATION DISCLOSURE Filing Date February 14, 2002 STATEMENT BY APPLICANT First Named Inventor Stanley S. Toncich Art Unit 2817 (use as many sheets as necessary) Examiner Name To Be Assigned Sheet of Attorney Docket Number UTL 00161

			U.S. PAT	ENT DOCUMENTS	
Examiner Initials	No.1	Document Number Number-Kind Code ² (if known	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
(P)	31	us- 6,097,263	08-01-2000	Mueller, Carl H., et al.	Figures Appear
<u> </u>	32	us- 5,987,314	11-16-1999	Salto, Atsushi	· · · ·
}	33	us- 5,472,935	12-5-1995	Yandrofski, Robert, et al.	and the state of t
	34	us- 4,799,066	01-17-1989	Deacon, Malcolm J.	
¥	35	us- 5,166,857	11-24-1992	Avanic, Branko, et al.	and the same section of th
	36	us- 5,880,921	03-09-1999	Tham, J.L. Julian, et al.	The state of the s
	37	us- 5,640,042	06-17-1997	Koscica, Thomas E., el al.	
-}	38	us- 4,835,499	05-30-1989	Pickett, Michael N.	Abstract, Fig. 3
	39	us- 3,413,543	11-26-1968	Schubring, et al.	Col. 4, lines 3- 31, Fig. 2
	40	us- 5,945,887	08-31-1999	Makino, Toshihiro, et al.	
- .	41	us- 5,973,568	10-26-1999	Shapiro, Gary, et al.	
1	42	us- 5,216,392	06-01-1993	Fraser, Randall S.	• • • • •
	43	us- 3,676,803	07-11-1972	Simmons, William J.	-
	44	us- 3,836,874	09-17-1974	Maeda, Minoru, et al.	* * * * * * * * * * * * * * * * * * * *
· !	45	us- 5,778,308	07-07-1998	Sroka, Peter, et al.	the second secon
- 1	46	US- 5,777,524	07-07-1998	Wojewoda, Carl E., et al.	-
1 . !-	47	us- 6,052,036	04-18-2000	Enstrom, Hakan, et al.	
à !	48	US- 6,292,143 B1	09-18-2001	Romanofsky, Robert R.	· · · · · · · · · · · · · · · · · · ·
49-1		us- 5,617,104	04-01-1997	Das, Satyendranath	یر یا دیون بیستون د سریسته میشد د
<u> </u>	<u>50 </u>	US-			and the state of t

		FORE	IGN PATENT D	OCUMENTS		_
Examiner Initials	Cite No.1	Foreign Patent Document Country Code 3 - Number 4 - Kind Code 3 (if known)	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Т6
0/2	51	EP 1 043 741 A2	10-11-2000	Klee, Mareike, et al.		ΙĖ
	52 53	EP 0 795 922 A1	09-17-1997	Tsuru, Teruhisa, et al.	***************************************	
	54	EP 0 909 024 A2 WO 00/79648 A1	04-14-1999	Nakamichi, et al.	THE THE PERSON NAMED AND ADDRESS OF THE PERSON NAMED AND ADDRE	
Mos	55	WO 00/79645 A1	12-28-2000	Varadan, Vijay K., et al.		<u> </u>
1	56		12-28-2000 12-28-2000 12-28-2000	Falk, Kent, et al. Yandrofski; et al.		
	57			randioloki, et al.	℃ ol. 8, lines 9-26,	
	58				Figs. 30-31; p. 14,	
	59			and the street and amount operation is provided in the best of the street operations and the street operations of the str	par. 4, abst.,	
	60				figs. 2, 4, 11	

Examiner Date 2-20-0 Considered

*EXAMINER: Initial titreference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Commissioner for Patents, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if Control of the patent document is attached.



PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB

control numb				Complete if Known			
	or form 1449B/PTO			Application Number	10/077,654		
INEOD	MATION	DIS	CLOSURE	Filing Date	February 14, 2002		
				First Named Inventor	Stanley S. Toncich		
ISTATI	EMENT B	SY A	PPLICANT	Group Art Unit	2817		
			n nooneean/)	Examiner Name	To Be Assigned		
Sheet	(use as many sl	of	6	Attorney Docket Number	UTL 00161		
SHEEL					<u> </u>		

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), nublisher, city and/or country where published.	Т2
M	61	A. Presser, "Varactor-Tunable, High-Q Microwave Filter," RCA Review, Vol. 42, Dec. 1981, pp. 691-705.	
M	62	C. Chang and T. Itoh, "Microwave Active Filters Based on Coupled Negative Resistance Method," IEEE Trans. on Microwave Theory and Techniques, Vol. 38, No. 12, Dec. 1990, pp. 1879-1884.	
03	63	P. Katzin, B. Bedard, and Y. Ayasli, "Narrow-Band MMIC Filters with Automatic Tuning and Q-Factor Control," 1993 IEEE MTT-S Int. Microwave Symp. Digest pp.403-406.	
gr.	64	B. Hopf, I. Wolff, and M. Guglielmi, "Coplanar MMIC Active Bandpass Filters Using Negative Resistance Circuits," 1994 IEEE MTT-S Symposium Digest, pp. 1183-1185.	
A.	65	U. Karacaoglu and I.D. Robertson, "High Selectivity Varactor-Tuned MMIC Bandpass Filter Using Lossless Active Resonators," 1994 IEEE MTT-Symposium Digest, pp. 1191-1194.	
17	66	B. Nauta, "A CMOS Transconductance-C Filter Technique for Very High Frequencies," IEEE Journal of Solid-State Circuits, Vol. 27, No. 2, February 1992, pp. 142-153.	
M	67	K Fujita, H. Itoh, R. Yamamoto, "A 15.6 GHz Commercially Based 1/8 GaAs Dynnamic Presealer," 1989 IEEE GaAs IC Symposium, pp. 113-116.	
(766	J. Smuk, P. Katzin, "MMIC Phase Locked L-S Band Oscillators," 1994 IEEE GaAs Symposium Digest, pp. 27-29.	
92	69	S. R. Chandler, I. C. Hunter, and J.G. Gardiner, "Active Varactor Tunable Bandpass Filter," IEEE Microwave and Guided Wave Letters, Vol. 3, No. 3, March 1993, pp. 70-71.	
Ja	70	I. C. Hunter and John D. Rhodes, "Electronically Tunable Microwave Bandpass Filters," IEEE Trans. on MTT, Vol. 30, No. 9, September 1982, pp. 1354-1367.	
	72	S. Toyoda, " Quarter-wavelength Coupled Variable Bandstop and Bandpass Filters Using Varactor Diodes," IEEE Trans. on Mtt, Vol. 30, No. 9, September 1982, pp. 1387-1389.	

Examiner A	Date	7-20-03
	 Considered	
Signature (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CONSIDERA	

₹ Initi and n unique iter Of the yea mbols ge Trar

atemen on the te, Was

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.





PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Condorman				Complete if Known		
	or form 1449B/PTO			Application Number	10/077,654	
INFOR	MATION	DIS	CLOSURE	Filing Date	February 14, 2002	
				First Named Inventor	Stanley S. Toncich	
ISTATI	EMENT BY	ΥA	PPLICANT	Group Art Unit	2817	
	(use as many she	vote a	c necessar/l	Examiner Name	To Be Assigned	
	(use as many site			Attorney Docket Number	UTL 00161	
Sheet	4	of				

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher city and/or country where published.	T ²
2	72	B. Yu. Kapilevich, "Variety of Approaches to Designing Microwave Active Filters," Proc. 27th European Microwave Conf., Jerusalem, Vol. 1, 1997, pp. 397-408.	
O.	73	B. Yu. Kapilevich, "Understand the Operation of Channelized Active Filters," Microwaves & RF, January 1997, pp. 89-92.	
Ne	74	M. Dishal, "Alignment and Adjustment of Synchronously Tuned Multiple Resonator-Circuit Filters" Proc. IRE 39, November 1951, pp. 1448-1455.	
P	75	S. B. Cohn, "Dissipation Loss in Multiple-Coupled-Resonator Filters," Proc. IRE 47, August 1959, pp. 1342-1348.	
B	76	G. L. Matthaei, "An Electronically Tunable Up-Converter," Proc. IRE 49, November 1961, pp. 1703-1704.	
13	77	E. G. Fubini and E.A. Guillemin, "Minimum Insertion Loss Filters," Proc. IRE 47, January 1959, pp. 37-41.	
p	78	W.J. Getsinger, "Prototypes for Use in Broadbanding Reflection Amplifiers," IEEE Trans. PTGMTT-11, November 1963, pp. 486-497.	
n	79	E.S. Kuh and M. Fukada, "Optimum Sunthesis of Wide-Band Parametric Amplifiers and Converters," IRE Trans. PCCT-8, December 1961, pp.410-415.	
n	80	W. J. Getsinger and G.L. Matthaei, "Some Aspects of the Design of Wide-Band Up-Converters and Nondegenerate Parametric Amplifiers," IEEE Trans. PTGMTT-12, January 1964, pp. 77-87.	
(J)	, 81	R. L. Sleven, "Design of a Tunable Multi-Cavity Waveguide Band-Pass Filter," 1959 IRE National Convention Record, Part 3, pp. 91-112.	
B	82	J.J. Taub and B. F. Bogner, "Design of Three-Resonator Dissipative Band-Pass Filters Having Minimum Insertion Loss," Proc. IRE 45, pp. 681-687 (May 1957).	
ŧ			

Date Examiner Considered Signature

*EXAMINER: Initial if reference considered, whether or of citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. A. Barrey

二十二年 日 三年 丁以上他自作到我你写了

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE control number.

Substitute for form 1449B/PTO Complete if Known INFORMATION DISCLOSURE Application Number 10/077,654 Filing Date February 14, 2002 STATEMENT BY APPLICANT First Named Inventor Stanley S. Toncich Group Art Unit 2817 (use as many sheets as necessary) Examiner Name To Be Assigned Sheet of Attorney Docket Number UTL 00161

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials	Cite No.	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the	T
0	83	VI VI	\dagger
P	84	Mobile Phones, pp. 69- 97 (September 15, 1999).	
M	85	P. K. Panayi, M. Al-Nuaimi, and L. P. Ivrissimtzis, "Tuning Techniques for the Planar Inverted-F Antenna," National Conference on Antennas and Propagation Publication, No. 461, pp. 259-262 (April 1999).	
M	86	Satoshi Makioka, et al., "A High Efficiency GaAs MCM Power Amplifier for 1.9 GHz Digital Cordless Telephones," IEEE 1994 Microwave and Millimeter-Wave Monolithic Circuits Symposium, pp. 51-54 (1994).	
0.72	87	V. K. Varadan, K. A. Jose, V. V. Varadan, "Design and Development of Electronically Tunable Microstrip Antennas," IOP Publishing Ltd., pp.238-242 (1999).	
12	88	Communication Relating to the Results of the Partial International Search: PCT/IB 02/01077 (2002).	
n	89	International Search Report: PCT/IB 02/01086 (June 24, 2002).	
m	90	International Search Report: PCT/IB 02/01078 (July 10, 2002).	
B	91	International Search Report: PCT/IB 02/01087 (July 19, 2002).	
P	92	International Search Report: PCT/IB 02/01107 (July 11, 2002).	
M:	93	International Search Report: PCT/IB 02/01120 (July 11, 2002).	

Examiner Date Signature Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is the conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.





PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office: u.S. DEPARTMENT OF COMMERCE

Only on the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

red to respond to a
Complete if Known
Application Number 10/077,654 February 14, 2002
Filing Date Stanley S. Toncich First Named Inventor 2817 Group Art Unit To Be Assigned
Group Art Unit To Be Assigned Examiner Name UTL 00161 Attorney Docket Number
Attorney Docket Number

	OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the linclude name of the author (in CAPITAL LETTERS), title of the appropriate, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue	2
kaminer Cite	item (book, illegamber(s) publisher city and/or Challe	1
itials No.1	International Search Report: PCT/IB 02/01098 (July 4, 2002).	
0 95	International Search Report: PCT/IB 02/01082 (July 8, 2002).	_
17	International Search Report: PCT/IB 02/01144 (July 12, 2002).	
P3 96	International Search Report: PCT/IB 02/01026 (June 28, 2002).	
1/2	International Search Report: PCT/IB 02/01027 (June 25, 2002).	
· O	8 International Course	
	09	
	00	
garages (1990) & W	101	
	102	_
	103	
	104	

Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. .Time will vary depending upon the needs of the individual case. A comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Tradem on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Tradem of the Amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Tradem of the Amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Tradem of the Amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Tradem of the Information Officer, U.S. Patent and Tradem of Informatio

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. and not considered. Include copy of this form with next communication to applicant.